

Multiple-Input Multiple-Output Radio Transceiver

Abstract

A MIMO radio transceiver to support processing of multiple signals for simultaneous transmission via corresponding ones of a plurality of antennas and to support receive processing of multiple signals detected by corresponding ones of the plurality of antennas. The radio transceiver provides, on a single semiconductor integrated circuit, a receiver circuit or path for each of a plurality of antennas and a transmit circuit or path for each of the plurality of antennas. Each receiver circuit downconverts the RF signal detected by its associated antenna to a baseband signal. Similarly, each transmit path upconverts a baseband signal to be transmitted by an assigned antenna.